

## Performance ready for a new era

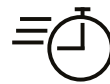
Blazing speed. Massive capacity. Built for AI and beyond. With up to twice the speed of the 990 PRO SSD<sup>1</sup> and up to an 8TB storage option,<sup>2</sup> the Samsung 9100 PRO SSD supercharges AI workloads, 4K video rendering, and gaming.



1TB	MZ-VAP1T0BW   UPC 887276904917
2TB	MZ-VAP2T0BW   UPC 887276904900
4TB	MZ-VAP4T0BW   UPC 887276904894
8TB	MZ-VAP8T0BW   UPC 887276904887

### Key Features

#### Breakthrough PCIe® 5.0 performance



Supercharge your workflow and gaming with PCIe® 5.0, boasting up to 14,800/13,400 MB/s<sup>1</sup> sequential read/write speeds. Tackle massive files and power up your gaming with Gen5—twice as fast as the 990 PRO SSD.

#### Every task, turbocharged



Speed past productivity limits. With random read/write speeds up to 2,200K/2,600K IOPS<sup>3</sup>, enjoy seamless AI apps, fast game loads, and efficient multitasking. Virtually no lag, no limits—just nonstop performance.

#### Boost AI Applications



With random read/write speeds of up to 2,200K/2,600K IOPS<sup>3</sup>, the 9100 PRO SSD fuels seamless AI content creation, swift loads, and smooth gameplay. Work, play, and create at lightning speed.

#### Designed for compatibility



From laptops to desktop PCs, experience blazing PCIe® 5.0 speeds and up to 8TB of storage. Perfect for video editing, gaming, and creative tasks, with the compatibility to match your device.

#### Stay cool, run fast



Push limits, not temperatures. A 5nm controller boosts power efficiency up to 49% over the 990 PRO SSD<sup>4</sup>, while advanced thermal control keeps performance smooth and reliable.

<sup>1</sup>Sequential and random write performance was measured with Intelligent Turbo Write technology being activated. Intelligent Turbo Write operates only within a specific data transfer size. Performance may vary depending on the SSD's firmware, storage capacity, system hardware & configuration, and other factors. For detailed information, please contact your local service center. The 4TB 9100 PRO SSD reaches 14,800 MB/s based on test system configuration: AMD Ryzen 9 7950X 16-Core Processor CPU@4.50GHz, DDR5 4800MHz 16GBx2, OS-Ubuntu 22.04.2, Chipset-ASRock-X670E-Taichi. To maximize the performance of the 9100 PRO SSD, please check whether your system supports PCIe 5.0 at the Intel or AMD website. <sup>2</sup>8TB capacity will be available later in 2025. <sup>3</sup>Sequential and random write performance was measured with Intelligent Turbo Write technology being activated. Intelligent Turbo Write operates only within a specific data transfer size. Performance may vary depending on the SSD's firmware, system hardware & configuration, and other factors. For detailed information, please contact your local service center. The 4TB 9100 PRO SSD reaches 2,200K/2,600K IOPS based on test system configuration: AMD Ryzen 9 7950X 16-Core Processor CPU@4.50GHz, DDR5 4800MHz 16GBx2, OS-Ubuntu 22.04.2, Chipset-ASRock-X670E-Taichi. To maximize the performance of the 9100 PRO SSD, please check whether your system supports PCIe 5.0 at the Intel or AMD website. <sup>4</sup>990 PRO SSD Sequential Read/Write - 1,221/1,255 MB/Watt, 9100 PRO SSD Sequential Read/Write - 1,822/1,703 MB/Watt based on test result of 2TB capacity model. Results vary by storage size.



## Specifications

Source: 2003-2023 OMDIA data: NAND suppliers' revenue market share.

Interface	PCIe® 5.0 x4, NVMe™ 2.0			
Form Factor	M.2 (2280)			
Hardware	V NAND TLC (V8) Controller In-House			
	Cache Memory			
	1 GB LPDDR4X	2GB LPDDR4X	3GB LPDDR4X	4GB LPDDR4X
Capacity	1TB	2TB	4TB	8TB
Idle (PS3 –APST on / PS4 –L1.2, Typical)	4.0mW / 3.3mW	4.8mW / 4.0mW	6.5mW / 5.7mW	TBD
Sequential Read/Write (MB/s)	Up to 14,800/13,400			
Random Read/Write (IOPS, QD32)	Up to 2,200K / 2,600K			
Data Encryption	Class 0 (AES256), TCG/Opal v2.0, MS eDrive (IEEE1667)			
Total Bytes Written	600 TBW	1,200 TBW	2,400 TBW	4,800 TBW
Warranty	Limited 5-year			



### 9100 PRO: Gen5 PCIe® NVMe™ SSD

